SECTION TABLE OF CONTENTS

DIVISION 10 - SPECIALTIES

SECTION 10100

VISUAL DISPLAY BOARDS



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SECTION 10100

VISUAL DISPLAY BOARDS

## PART 1 GENERAL

This section includes furnishing tackboards and installation of tackboards and markerboards, including trim and fasteners, as indicated on the drawings.

### 1.1 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Visual Display Boards; GA.

Manufacturer's descriptive data, catalog cuts, installation instructions, and maintenance instructions. The descriptive data shall show gauges, profiles, and details of construction. Indicate hardware and methods of attachment to be used.

## PART 2 PRODUCTS

### 2.1 TACKBOARDS

Tackboards shall be Vinyl TacTex™ or approved equal consisting of a self-healing, pliable vinyl embossed surface laminated to 1/4" thick natural cork which is laminated to 1/4" thick hardboard. All exposed aluminum shall be anodized satin finish in extruded shapes of approved design and thickness. All tackboards shall be uniform in appearance and style and shall be from one manufacturer. The tackboard units shall be completely assembled in one piece without joints, whenever possible.

#### 2.1.1 Hardware

The boards shall be mounted with tamperproof fasteners or with completely concealed continuous hangers. All grounds, clips, backing materials, adhesives, brackets, anchors, trim, and accessories necessary for a complete installation shall be provided.

## PART 3 EXECUTION

### 3.1 INSTALLATION

The units shall be installed at locations and mounting heights indicated and in accordance with the manufacturer's instructions. Perimeter lines shall be straight, plumb, and level.

Where dimensions exceed panel size, provide 2 or more pieces of equal length as acceptable to the Contracting Officer. When overall dimensions require delivery in separate units, prefit components at the factory, disassemble for delivery, and make final joints at the site. Use splines at joints to maintain surface alignment. Bottom edge of tackboards terminating at bases shall be protected with a "J" aluminum molding. Set molding horizontally prior to installing tackboards.

-- End of Section --

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DIVISION 10 - SPECIALTIES

SECTION 10160

TOILET ENCLOSURES



-- End of Section Table of Contents --

SECTION 10160

TOILET ENCLOSURES

PART 1 GENERAL

1.1 SYSTEM DESCRIPTION

Toilet partition system, including toilet enclosures, room entrance screens, and urinal screens, shall be a complete and usable system of panels, hardware, and support components. The partition system shall be provided by a single manufacturer and shall be a standard product as shown in the most recent catalog data. The partition system shall be as shown.

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Toilet Partition System; FIO.

Manufacturer's technical data and catalog cuts including installation and cleaning instructions.

SD-14 Samples

Toilet Partition System; GA.

Manufacturer's standard color charts and color samples.

1.3 DELIVERY, STORAGE, AND HANDLING

Components shall be delivered to the jobsite in the manufacturer's original packaging with the brand, item identification, and project reference clearly marked. Components shall be stored in a dry location that is adequately ventilated; free from dust, water, or other contaminants; and shall have easy access for inspection and handling.

PART 2 PRODUCTS

2.1 TOILET ENCLOSURES

Toilet partitions shall be floor-to-ceiling steel pilaster style. Finish surface of enclosure shall be baked enamel. Length and height of screen shall be as shown. Pilaster shoes shall be stainless steel. Color of enclosure materials shall be as selected by the Contracting Officer from manufacturer's standard colors.

2.2 URINAL SCREENS

Urinal screen shall be Type III steel with a baked enamel surface finish. Length and height of screen shall be as shown. Panels shall be 1-1/4 inch thick with continuous flanged end for attachment to wall. Color of screen materials shall be as selected by the Contracting Officer from the manufacturer's standard colors.

## 2.3 HARDWARE

Toilet enclosure hardware shall be stainless steel and standard with the manufacturer and shall be suitable for heavy duty usage. Hinges shall be suitable for complete support of the screen door. Screen latch shall have emergency access by use of a special key or device or by lifting the screen. Screen shall stand open about six inches when not latched. Screen shall have handle on the inside, and strike and bumpers with coat hook as required. Hardware finish shall be highly resistant to alkalies, urine, and other common toilet room acids.

# PART 3 EXECUTION

## 3.1 INSTALLATION

Toilet partitions shall be installed straight and plumb in accordance with approved manufacturer's instructions with horizontal lines level and rigidly anchored to the supporting construction. Where indicated, anchorage to walls shall be by expansion-bolting. Drilling and cutting for installation of anchors shall be at locations that will be concealed in the finished work.

## 3.2 ADJUSTING AND CLEANING

After installation toilet enclosure door shall be adjusted to operate smoothly, without binding and assure proper functioning of latches. All work of this Section shall be cleaned, in accordance with manufacturer's instructions, and protected from damage until acceptance.

-- End of Section --

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DIVISION 10 - SPECIALTIES

SECTION 10350

FLAGPOLES



-- End of Section Table of Contents --

SECTION 10350

FLAGPOLES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN ARCHITECTURAL MANUFACURER'S ASSOCIATION (AAMA)

| | |
|---|---|
| AAMA 606.1 | () Voluntary Guide Specifications and Inspection Methods for Integral Color Anodic Finishes for Architectural Aluminum |

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

| | |
|---|---|
| ASTM B 221 | (1995) Aluminum and Aluminum Alloy Extruded Bars, Rods, Wires, Shapes and Tubes |
| ASTM B 241 | (1996) Aluminum and Aluminum Alloy Seamless Pipe/Extruded Tube |

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Flag Pole Data; FIO.

The Contractor shall submit catalog cuts or manufactures literature for the flagpoles that include product specifications for the flagpole.

SD-04 Drawings

Flag Pole Shop Drawings; FIO.

Detailed drawings for the flagpole shall be submitted to the Contracting Officer. These drawings shall show construction and installation details and shall include the base and final ball.

PART 2 PRODUCTS

2.1 MATERIALS

The Contractor shall provide and instal two (2) flagpoles, one having a nominal height of 50 feet and the other having a nominal height of 40 feet (above ground). The flagpoles shall be a tilting, counterbalanced type. The pole shall remain balanced in all positions when pivoted.

2.1.1 Pole

The pole shall be fabricated of seamless extruded aluminum tube in accordance with ASTM B 241. Extruded aluminum shall conform to the requirements of ASTM B 241, Alloy 6063-T6. The taper shall not exceed 50 percent of outside diameter of the pole. If the flagpole is shipped in more than one section, a self-aligning sleeve for field joints shall be provided.

2.1.2 Base

The base shall be structural grade steel or better with a factory paint finish.

2.1.3 Hardware

Miscellaneous parts shall conform to ASTM B 221.

a. Final Ball. The ball shall be a spun aluminum sphere with a nominal thickness of 0.075 inches and seams of the ball welded flush and watertight. The ball shall be 8 inches diameter and shall be mounted on a threaded rod to fit the truck.

b. Truck. The pole shall be equipped with an extra heavy, non-fouling, ball bearing type truck with a cast bronze body. The truck shall be fitted with two cast bronze, nylon-bushed sheaves on stainless steel axles.

c. Halyards. Two sets of 3/8 inch diameter, nylon braided rope having not less than two bronze swivel snaps for each halyard shall be provided.

d. Cleats. Two bronze cleats, minimum 9 inches in length, shall be secured to the pole with two 3/8 inch flat head stainless steel machine screws.

2.2 FINISHES

The flagpole and components shall be finished as indicated. Material to be anodized shall be the finest dark bronze anodized to AA M12 C22A42, Class 1 (0.7 mil) in accordance with the requirements of AAMA 606.1.

2.2.1 Flagpole Shaft

The flagpole shaft shall be satin brushed, dark bronze anodized aluminum and shall be heavily waxed.

2.2.2 Final Ball

The ball shall be clear anodized aluminum with a gold finish to match rails and shall be heavily waxed.

2.2.3 Base and Cleats

The base and cleats shall be finished to match the flagpole.

## PART 3 EXECUTION

### 3.1 INSTALLATION

The flagpole shall be installed as shown on the contract drawings. Grounding shall be in accordance with SECTION: LOCK ELECTRICAL WORK.

-- End of Section --

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DIVISION 10 - SPECIALTIES

SECTION 10440

INTERIOR SIGNAGE



-- End of Section Table of Contents --

SECTION 10440

INTERIOR SIGNAGE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

| | |
|---|---|
| 36 CFR 1191 | Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities |
| 41 CFR 101-19.6 | (Basic) Uniform Federal Accessibility Standards |

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

| | |
|---|---|
| ANSI Z97.1 | (1984; Rev 1994) Safety Performance Specifications and Methods of Test for Safety Glazing Materials Used in Buildings |

1.2 GENERAL

Interior signage shall be of the design, detail, sizes, types, and message content shown on the drawings, shall conform to the requirements specified, and shall be provided at the locations indicated. Signs shall be complete with lettering, framing as detailed, and related components for a complete installation.

1.2.1 Character Proportions and Heights

Letters and numbers on indicated signs in handicapped-accessible buildings, which do not designate permanent rooms or spaces, shall have a width-to-height ratio between 3:5 and 1:1 and a stroke-width-to-height ratio between 1:5 and 1:10. Characters and numbers on indicated signs shall be sized according to the viewing distance from which they are to be read. The minimum height is measured using an upper case letter "X". Lower case characters are permitted. Suspended or projected overhead signs shall have a minimum character height of 3 inches.

1.2.2 Raised and Brailled Characters and Pictorial Symbol Signs (Pictograms)

Letters and numbers on indicated signs which designate permanent rooms and spaces in handicapped-accessible buildings shall be raised 1/32 inch upper case, sans serif or simple serif type and shall be accompanied with Grade 2 Braille. Raised characters shall be at least 5/8 inch in height, but no higher than 2 inches. Pictograms shall be accompanied by the equivalent verbal description placed directly below the pictogram. The border

dimension of the pictogram shall be 6 inches minimum in height. Indicated accessible facilities shall use the international symbol of accessibility.

## 1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Interior Signage; FIO.

Manufacturer's descriptive data, catalogs cuts, installation and cleaning instructions.

SD-04 Drawings

Interior Signage; FIO.

Drawings showing elevations of each type of sign, dimensions, details and methods of mounting or anchoring, shape and thickness of materials, and details of construction.

SD-14 Samples

Interior Signage; FIO.

One sample of each of the following sign types showing typical quality and workmanship. The samples may be installed in the work, provided each sample is identified and location recorded.

a. 8" x 8" sign with tactile letters/graphics.

b. 4" x 8" sign with tactile letters.

c. 1-1/2" x 8" sign with smooth face.

d. Two samples of manufacturer's standard color chips for each material requiring color selection.

## 1.4 QUALIFICATIONS

Signs, plaques, and dimensional letters shall be the standard product of a manufacturer regularly engaged in the manufacture of such products and shall essentially duplicate signs that have been in satisfactory use at least 2 years prior to bid opening.

## 1.5 DELIVERY AND STORAGE

Materials shall be delivered to the jobsite in manufacturer's original packaging and stored in a clean, dry area in accordance with manufacturer's instructions.

# PART 2 PRODUCTS

Interior signage shall be of the sizes and types shown on the drawings,

shall conform to the requirements specified herein, and shall be provided at the locations indicated. Signs shall be complete with lettering, framing as detailed, and related components for a complete installation.

## 2.1 VINYL SHEETING FOR GRAPHICS

Vinyl sheeting for graphics shall be a minimum 0.08 mm (0.003 inch) film thickness. Film shall include a precoated pressure sensitive adhesive backing.

## 2.2 ACRYLIC SHEET

Acrylic sheet for panels and components shall conform to ANSI Z97.1.

## 2.3 ANCHORS AND FASTENERS

Exposed anchor and fastener materials shall be compatible with metal to which applied and shall have matching color and finish. Anchorage system shall be of the type recommended by the manufacturer of the indicated substrate. Where recommended by signage manufacturer, foam tape pads may be used for anchorage. Foam tape pads shall be minimum 1/16 inch thick closed cell vinyl foam with adhesive backing. Adhesive shall be transparent, long aging, high tech formulation on two sides of the vinyl foam. Adhesive surfaces shall be protected with a 5 mil green flatstock treated with silicone. Foam pads shall be sized for the signage as per signage manufacturers recommendations.

## 2.4 PLAQUE SIGNS

Plaque signs shall be a modular type signage system. Signs shall be fabricated of Type ES laminated thermosetting plastic suitable for engraving or acrylic plastic conforming to ANSI Z97.1.

### 2.4.1 Standard Modular Plaque Signs

Plaque signs shall consist of matte finish acrylic plastic, thickness and size as shown.

## 2.5 FABRICATION AND MANUFACTURE

### 2.5.1 Factory Workmanship

Holes for bolts and screws shall be drilled or punched. Drilling and punching shall produce clean, true lines and surfaces. Exposed surfaces of work shall have a smooth finish and exposed riveting shall be flush. Fastenings shall be concealed where practicable.

### 2.5.2 Dissimilar Materials

Where dissimilar metals are in contact, the surfaces will be protected to prevent galvanic or corrosive action.

## 2.6 GRAPHICS

### 2.6.1 Tactile Graphics

Signage that provides permanent general circulation directions, or identification of spaces shall be tactile (perceptible to touch) and shall comply with 36 CFR 1191. Signage shall be fabricated in accordance with

the requirements of 36 CFR 1191 and 41 CFR 101-19.6. For signage requirements that are not included in 36 CFR 1191 but are included in 41 CFR 101-19.6 then, signage fabrication shall additionally comply with those requirements included in 41 CFR-101-19.6 but missing from 36 CFR 1191. Characters, symbols or pictographs on tactile signs shall meet CFR 1191 Grade 2 braille. Characters and symbols shall contrast with their background.

### 2.6.2 Messages

See drawings and interior sign schedule for message content, typeface and type size.

## 2.7 COLOR, FINISH, AND CONTRAST

Color shall be black on white.

# PART 3 EXECUTION

## 3.1 INSTALLATION

Signs shall be installed in accordance with approved manufacturer's instructions at locations shown on the drawings. Signs shall be installed plumb and true at mounting heights indicated, and by method shown or specified. Signs on doors or other surfaces shall not be installed until finishes on such surfaces have been installed.

### 3.1.1 Anchorage

Anchorage shall be in accordance with approved manufacturer's instructions. Anchorage not otherwise specified or indicated shall include slotted inserts, expansion shields, and power-driven fasteners when approved for concrete; toggle bolts and through bolts for masonry; machine carriage bolts for steel; lag bolts and screws for wood.

### 3.1.2 Protection and Cleaning

The work shall be protected against damage during construction. Hardware and electrical equipment shall be adjusted for proper operation. Glass, frames, and other sign surfaces shall be cleaned in accordance with the manufacturer's approved instructions.

-- End of Section --

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DIVISION 10 - SPECIALTIES

SECTION 10520

FIRE PROTECTION EQUIPMENT



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SECTION 10520

FIRE PROTECTION EQUIPMENT

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

UNDERWRITERS LABORATORIES (UL)

| | |
|---|---|
| UL 711 | (1995) Rating and Fire Testing of Safety Fire Extinguishers (Also ANSI 711) |

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Fire Protection Data; FIO.

Manufactures descriptive data shall be submitted for the cabinets, including catalog cuts, erection details, and installation instructions. The data shall include product specifications, indicating material type and thickness, dimensions; and construction details.

PART 2 PRODUCTS

The products listed represent the nature and quality of products required for the satisfactory performance of the work, and are not intended to prohibit the selection of equivalent products by other manufacturers.

2.1 MATERIALS

2.1.1 Fire extinguishers

Extinguishers shall be carbon dioxide type, with a 10-B:C rating and ten pound charge. The rating shall be determined in accordance with UL 711. The extinguishers shall include a label showing the listing mark for Underwriters' Laboratories, the fire rating and charge, the product name, and the manufacturer's name and address. The label shall be embossed or engraved on metal.

2.1.2 Recessed cabinets

Cabinet doors shall be narrow-glazed style with double strength glass. Cabinet and door shall be steel with baked enamel finish. Doors shall have

a handle and continuous hinge. Die cut red letters "FIRE EXTINGUISHER" shall be installed on the cabinets. The recessed cabinets shall meet or exceed the structural soundness and be similar in appearance to the following:

a. Architectural Series Model 2712R with Vertical Duo Door as manufactured by Larsen's Manufacturing, Inc., Minneapolis, Minnesota.
b. Ambassador Model 2013V10 as manufactured by J.L. Industries, Bloomington, Minnesota.
c. 100 Series Model 104R-1 with Vertical Duo Door as manufactured by Modern Metal Products Division of Technico, Owatonna, Minnesota.

2.1.3 Surface mounted cabinets

Cabinet doors shall be narrow-glazed style with double strength glass. Cabinet and door shall be steel with baked enamel finish. Door shall have handle and continuous hinge. Die cut red letters "FIRE EXTINGUISHER" shall be installed on the cabinets. The surface mounted cabinets shall meet or exceed the structural soundness and be similar in appearance to the following:

a. Architectural Series Model 2712SM with Vertical Duo Door as manufactured by Larsen's Manufacturing, Inc., Minneapolis, Minnesota.
b. Ambassador Model 2015V10 as manufactured by J.L. Industries, Bloomington, Minnesota.
c. 100 Series Model 104SM with Vertical Duo Door as manufactured by Modern Metal Products Division of Technico, Owatonna, Minnesota.

## PART 3 EXECUTION

### 3.1 INSTALLATION

Install cabinets in recesses constructed in walls as shown and as specified. Work shall be straight, plumb, well anchored, and sightly. The Contractor shall coordinate details and dimensions. Fire extinguishers shall be provided complete and ready for use where shown on the drawings.

-- End of Section --

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DIVISION 10 - SPECIALTIES

SECTION 10670

SELVING AND WORK BENCHES



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SECTION 10670

SELVING AND WORK BENCHES

## PART 1 GENERAL

This section covers the furnishing and installation of metal storage shelving (indicated on the drawings as "racks") adjustable shelving, including all framing, fasteners, clips, brackets, and shelves, and metal and wood work benches.

### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANAI/BHMA A156 (1994) Cabinet Hardware

### 1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Shelf Data; FIO.

Manufacturer's data, including catalogue information and assembly and installation instructions, shall be submitted.

## PART 2 PRODUCTS

### 2.1 MATERIALS

#### 2.1.1 Metal storage shelving

Metal storage shelving shall be provided complete and ready for use where shown on the drawings. Each unit shall be as shown, and provide minimum of seven shelves. The framing shall allow ganging of several units together; the use of common uprights shall be permitted. Components, including uprights, beams, struts, braces, brackets, and shelves shall be interchangeable. Uprights shall be formed of not less than 12 gauge material, stiffened and/or reinforced as standard by the manufacturer; and punched for shelf brackets or bracing at not less 2 inch centers. Beams, braces, struts, and brackets shall be formed of not less than 12 gauge material. Shelves shall be not less than 12 gauge material and be able to support a minimum of 850 lbs. Front and rear edges shall have a "box W" shape. Provide all clips, fasteners and else required for complete assembly as indicated.

2.1.2 Adjustable bracket shelving

Adjustable bracket shelving shall be extra heavy duty standards with brackets. Standards and brackets shall be 12 gauge steel; anachrome finish. Standards shall be 7/8 inch wide by 6 feet 0 inch long slotted to 2 inch increments. Brackets shall be sized to support 12 inch wide shelf.

2.1.3 Shelving for adjustable brackets

Shelving for adjustable brackets shall be 5/8" particle board, 12" wide, length as shown. Top, bottom, and three edges to be finished with plastic laminate. Lead edge to be finished with a minimum 1/2 inch oak strip. Color of laminate to be as selected by the Contracting Officer from manufacturer's standard colors.

2.1.4 Metal Work Benches and Tool Cabinets

Metal Work Benches and Tool Cabinets shall be Lyon Metal Products, Inc. "Modular Work Stations" or equal. The laminated hardwood countertop shall be 2" thick fabricated from 2" wide x 1-3/4" thick kiln-dried maple. Top to have 180 degree rounded edge.

2.1.5 Wood Work Benches

Wood Work Benches shall be of heavy wood construction in accordance with SECTION: ROUGH CARPENTRY with a 1/8" steel plate top and splash. The top shall be fastened to wood members with flat head screws flush with counter top. Splash shall be fastened into wood blocking with flat head screws as above. See architectural drawings for details. Steel plate shall be as specified in SECTION: MISCELLANEOUS METALS.

2.1.6 Wood Bench Hardware

Side Mounted Drawer Slides: ANSI A156.9, BO5051.
Roller Spring Catch: ANSI A156.9, BO3053.
Semiconcealed Hinges: ANSI A156.9, BO1361.
Back Mounted Pulls: ANSI A156.9, BO2011.

PART 3 EXECUTION

3.1 INSTALLATION

Install metal storage shelving and work benches as shown and as specified. Work shall be straight, plumb, well anchored, and sightly. The Contractor shall coordinate details and dimensions. Install in accordance with manufacturer's instructions. Use anchoring devices to suit conditions and substrate materials encountered. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner. Adjust doors, drawers, hardware, fixtures, and other moving or operating parts to function smoothly.

3.1.1 Casework

Scribe casework to abutting surfaces with maximum gaps of 1/32 inch and align adjoining components. Apply matching filler pieces where casework abuts dissimilar construction (not additional overlay trim). Close ends of units, back splashes, shelves and bases.

### 3.1.2 Metal Items

Insulate to prevent galvanic corrosion between dissimilar metals. Field weld joints in stainless steel work, without open seams.

-- End of Section --

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DIVISION 10 - SPECIALTIES

SECTION 10800

TOILET AND BATH ACCESSORIES



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SECTION 10800

TOILET AND BATH ACCESSORIES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 1036 (1991) Flat Glass

COMMERCIAL ITEM DESCRIPTIONS (CID)

CID A-A-2380 (Rev A) Dispenser, Paper Towel

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation, submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-14 Samples

Finishes; GA

One sample of each accessory proposed for use. Samples shall be accompanied by descriptive data indicating materials of construction, fasteners proposed for use for each type of wall construction, and mounting instructions. Approved samples may be incorporated into the finished work, provided they are identified and their locations noted.

SD-19 Operation and Maintenance Manuals

Electric Hand Dryer; FIO

Four complete copies of maintenance instructions listing routine maintenance procedures and possible breakdowns and repairs. Instructions shall include simplified wiring and control diagrams and other information necessary for unit maintenance.

1.3 DELIVERY, STORAGE, AND HANDLING

Toilet accessories shall be wrapped for shipment and storage, delivered to the jobsite in manufacturer's original packaging, and stored in a clean, dry area protected from construction damage and vandalism.

1.4 WARRANTY

Manufacturer's standard performance guarantees or warranties that extend beyond a 1 year period shall be provided.

## PART 2 PRODUCTS

### 2.1 LOCATION

Toilet accessories as specified herein shall be provided where indicated in accordance with paragraph SCHEDULE.

### 2.2 ANCHORS AND FASTENERS

Anchors and fasteners shall be capable of developing a restraining force commensurate with the strength of the accessory to be mounted and shall be suited for use with the supporting construction. Each accessory item shall be complete with the necessary mounting plates, anchors, and fasteners. Concealed mounting plates shall be of sturdy construction with corrosion resistant surface. Where exposed fasteners are permitted, they shall have oval heads and finish to match the accessory.

### 2.3 FINISHES

Except where noted otherwise, finishes on metal shall be provided as follows:

| Metal | Finish |
|---|---|
| Stainless steel | No. 4 general purpose polished |
| Carbon steel, copper alloy, and brass | Chromium plated, bright |

### 2.4 TOILET ACCESSORIES

Accessory items shall conform to the requirements specified below.

#### 2.4.1 Grab Bar (GB)

Grab bar shall be 18 gauge, 1-1/2 inches OD Type 304 stainless steel. Grab bar shall be form and length as indicated. Flange shall have screw mounting holes concealed on the lip of the flange. Grab bar shall have a smooth finish. Installed bars shall be capable of withstanding a 500 pound vertical load without coming loose from the fastenings and without obvious permanent deformation. Space between wall and grab bar shall be 1-1/2 inch.

#### 2.4.2 Mirrors and Frames

Frames for plate-glass mirrors shall be fabricated from corrosion-resisting steel with satin finish. Frames shall be provided with concealed fittings and tamperproof mountings. Glass for mirrors shall be Type I transparent flat type, Class 1-clear. Mirror Quality q2 1/4 inch thick conforming to ASTM C 1036. Glass shall be coated on one surface with silver coating, copper protective coating, and mirror backing paint. Silver coating shall be highly adhesive pure silver coating of a thickness which shall provide reflectivity of 83 percent or more of incident light when viewed through 1/4 inch thick glass, and shall be free of pinholes or other defects. Copper protective coating shall be pure bright reflective copper,

homogeneous without sludge, pinholes or other defects, and shall be of proper thickness to prevent "adhesion pull" by mirror backing paint. Mirror backing paint shall consist of two coats of special scratch and abrasion-resistant paint and shall be baked in uniform thickness to provide a protection for silver and copper coatings which will permit normal cutting and edge fabrication.

2.4.3 Paper Towel Dispenser (PTD)

Paper towel dispenser shall conform to CID A-A-2380, Type I, shall be constructed of not less than 0.269 inch Type 304 stainless steel, and shall be surface mounted. Locking mechanism shall be concealed tumbler key lock.

2.4.4 Sanitary Napkin and Tampon Dispenser (SND)

The sanitary napkin and tampon disposer shall be a disposable liner type and shall be partition mounted. Sanitary napkin and tampon disposer shall be constructed of 22 gauge, Type 304 stainless steel. Fifty disposable liners of the type standard with the manufacturer shall be provided.

2.4.5 Soap Dispenser (SD)

Soap dispenser shall be liquid-type consisting of a vertical stainless steel tank with holding capacity of 40 ounces minimum.

2.4.6 Soap Holder (SH)

Soap holder shall be type 304 stainless steel. The soap holders shall be seamless, one piece construction.

2.4.7 Toilet Tissue Dispenser (TTD)

Toilet tissue dispenser shall be surface mounted with two rolls of tissue stacked vertically. Cabinet shall be a stainless steel satin finish.

2.4.8 Robe Hook (RH)

Robe hook shall be stainless steel in a twin hook style with exposed anchors.

2.4.9 Locker bench pedestal

Locker bench pedestal shall be heavy duty type with heavy top flanges, cast bottom flanges and pipe columns. Pedestals shall have baked enamel finish. Pedestals shall be spaced at maximum 6'-0" centers. Furnish all fasteners and heavy duty anchors.

2.4.10 Electric Hand Dryer (EHD)

Electric hand dryers shall be wall mounted and shall be designed to operate on 110/125 volts, 60 cycle, single phase alternating current with heating element core rating of not more than 2300 watts. The dryer housing shall be a grey iron casting, single piece construction with white porcelain enamel finish on all exposed portions. Driers shall be UL approved and have an insulated push-button.

2.4.11 Diaper Changing Station (DCS)

Diaper changing station shall be surface mounted and shall be fabricated of

high impact plastic with no sharp edges. Unit fold down platform shall be concave to the child's shape, equipped with nylon and velcro safety straps and engineered to withstand a minimum static load of 340 lb. Safety graphics shall be pictorial for universal use. Color shall be selected by the Contracting Officer from manufactures standard colors. Two units shall be installed in the rest room building at locations shown.

## 2.5 BATH ACCESSORIES

### 2.5.1 Shower Seat

The shower seat shall be plastic and approved by the American Disabilites Act for a 3' x 3' shower.

### 2.5.2 Shower Door

The shower door shall be clear tempered glass with silver anodized aluminum trim.

# PART 3 EXECUTION

## 3.1 INSTALLATION

Toilet accessories shall be securely fastened to the supporting construction in accordance with the manufacturer's approved instructions. Accessories shall be protected from damage from the time of installation until acceptance.

## 3.2 SCHEDULE

| | | Accessories Required | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Room No. | Room Name | GB | PTD | SD | SH | RH | TTD | SND | EHD |
| 107 | Men's Toilet | 2 | 1 | 1 | | | 1 | | 1 |
| 104 | Women's Toilet | 2 | 1 | 1 | | 1 | 1 | 1 | 1 |
| 106 | Shower | 1 | | | 1 | 1 | | | |
| 108 | Shower | 1 | | | 1 | 1 | | | |
| 204 | Toilet | | 1 | 1 | | | 1 | | 1 |

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DIVISION 10 - SPECIALTIES

SECTION 10900

LOCKERS, METAL



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SECTION 10900

LOCKERS, METAL

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-04 Drawings

Locker Drawings; FIO.

Shop drawings shall show plans, elevations, sections, details of construction, thicknesses of members, methods of fastening, details of hardware, such other information as necessary to fully describe the lockers to be furnished and their installation into the work, and specifications for the required finish.

SD-14 Samples

Locker Colors; GA.

Color samples for all of the manufacturer's standard colors shall be provided for selection.

PART 2 PRODUCTS

2.1 DESIGN

Lockers shall be constructed of steel. Design of lockers shall be by the Contractor based on the specified requirements being the minimum acceptable. Common sides or backs between adjacent units are permissible. The dimensions specified are for the purpose of establishing general layout. Minor variations necessary to coordinate the details of construction will be permitted. Details not shown or otherwise specified shall be logical and compatible with the details specified or shall be in accordance with alternate details approved for use. All parts shall be manufactured to standards that will permit replacement without modification of remaining parts. Materials not definitely specified shall be of a quality consistent with the quality required for other materials and suitable for the end use.

2.2 CONFIGURATION

Lockers shall be one-compartment type with two same-sized hinged doors, both running from the top to the bottom of the locker, and shall contain three double-prong clothes hooks and a hat shelf. General dimensions, insofar as manufacturing tolerances and standard commercial sizes permit, shall be in accordance with the following:

Overall width: 24 inches.

Overall depth: 24 inches.

Overall height: 72 inches.

Hat Shelf: Fifteen inches deep by full width of locker and 63 inches above finished floor of locker.

Double-Prong Clothes Hook: One centered on each rigid face of unit with 4 inch clearance from hat shelf.

Combination Lock: One factory assembled into each door panel, operable also by master key.

## 2.3 DELIVERY AND STORAGE

Steel lockers may be delivered knocked-down. Lockers shall be delivered to the site in undamaged condition, stored in fully covered areas, and protected from damage.

## 2.4 MATERIALS

### 2.4.1 Hardware

#### 2.4.1.1 Hinges

Hinges shall be brass or steel, not less than 0.062-inch thick, 5 knuckle, tamper-proof institutional type, joint length not less than 2-1/2 inches, primed for paint finish. When doors are closed, only a smooth beveled and rounded joint shall be exposed. Doors shall have three hinges.

#### 2.4.1.2 Latches

The doors shall be provided with a three-point latching and locking mechanism. The handle shall be of the lever type, of cast brass or bronze, and shall be designed to permit locking by padlocking the handle to a steel keeper with a matching hole. A 14-gauge rectangular corrosion resisting steel shield shall be provided to protect the door from damage at the handle and padlock area. The interior components of the mechanism shall include locking bars or rods not less than ½-inch thick, two steel upper guides and two steel lower guides, three-finger cam, and applied strikes or reinforced openings for latching. The handle, keeper, and locking bars or rods shall have a chromium finish, and all other components shall have a chromium, nickel, zinc, or cadmium plated finish.

#### 2.4.1.3 Silencers

Silencers of rubber or similar resilient material shall be provided on door frames at close proximity to each latching point to minimize noise when the door is closed. Silencers shall be replaceable.

#### 2.4.1.4 Clothes hooks

Clothes hooks shall be chromium-plated or zinc-coated steel. Hooks and fasteners shall be deburred and smooth to not pose a hazard to user or contents stored.

2.4.1.5 Locks

Locks shall be heavy duty, dial type combination lock. Lock shall be securely fastened to door panel from inside, with tamperproof fasteners. Master key shall also operate lock. All locks shall be keyed alike.

2.4.2 Steel Sheets

Steel sheets shall be cold-rolled, commercial quality, stretcher level degree of flatness and of manufacturer's standard gauges specified.

2.4.3 Steel Locker Construction

2.4.3.1 Workmanship

Sheet metal bends shall be accurately formed. Cut edges shall be straight and smooth. Holes for the reception of mechanical fasteners shall be accurately punched or drilled and have all burrs removed. Butt welds shall extend full width of joining edges, shall be ground smooth and flush with adjacent surfaces when on exterior of lockers. Resistance welds shall be 3/16-inch minimum diameter and maximum spacing of 8 inches on center. Welds shall be thoroughly fused and sound, and shall be free from cracks, fissures, pits, holes, gas pockets, porosity, and under cuttings. There shall be no sharp corners or protrusions of any kind in the final assembled lockers. Use of mechanical fasteners exposed to exterior of unit shall be limited to those required for application of hardware and scribes.

2.4.3.2 Back and Side Panels

Back and side panels shall each be formed of sheet steel not lighter than 22 gauge and shall be reinforced if necessary to impart rigidity to unbroken spans.

2.4.3.3 Door Frame

Uprights and cross members shall be not lighter than 16 gauge steel and formed as required to provide strength and rigidity to side panels, top, and bottom without exposing fasteners. Fronts formed as part of side panels shall be equivalent to the specified 16 gauge steel construction. With the door closed, clearance between door edge and frame shall be uniform and shall not exceed 1/8 inch and door face shall be flush with the face of the front.

2.4.3.4 Top

Top shall be not lighter than 22 gauge steel, flat exterior surface, and formed as required for securing to back, front, and sides.

2.4.3.5 Bottom

Bottom shall be not lighter than 18 gauge steel and formed as required for securing to back, front and sides, and to concrete base.

2.4.3.6 Hat Shelf

Hat shelf shall be not lighter than 18 gauge steel and formed as required for securing to back and sides.

2.4.3.7 Doors

Doors shall be of single-wall type with not lighter than 16 gauge panel. Door shall be reinforced or otherwise prepared for the reception of hardware and to provide strength and rigidity to the doors. Doors shall be louvered top and bottom for ventilation.

2.4.3.8 Scribes and Closures

Scribes and closures shall be not lighter than 20 gauge.

2.4.3.9 Finish

Finish shall be an approved factory-applied baked-enamel, semigloss finish in accordance with manufacturer's standard finishes. Color will be selected from available custom colors.

## PART 3 EXECUTION

### 3.1 INSTALLATION

Wardrobes shall be installed in accordance with the manufacturer's approved installation instructions and positioned in accordance with the layout shown, set level, and secured in place. Wardrobes with backs to walls shall be secured to the wall. Free standing or island-type installations shall be secured to the floor. Wardrobes which are adjacent to each other shall be secured to each other. There shall be no sharp corners or protrusions in the final assembled wardrobes. Hardware shall be adjusted and left in good working order. Doors and drawers shall not stick or bind. Wardrobes shall be cleaned and protected from damage until acceptance.

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